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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/752,721	01/03/2001	Bum Joo Seo	0465-0795P-SP	1215
2292 7590 03/21/2008 BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747				
EXAMINER				
VENT, JAMIE J				
ART UNIT		PAPER NUMBER		
2621				
NOTIFICATION DATE		DELIVERY MODE		
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary

Application No.

09/752,721

Applicant(s)

SEO, BUM JOO

Examiner

JAMIE JO VENT

Art Unit

2621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 December 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
- Paper No(s)/Mail Date: _____

- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date: _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on May 16, 2007 has been entered.

Response to Arguments

2. Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection in view of Pauley (US 5,900,916).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-3, 24 are rejected under 35 U.S.C. 103(a) unpatentable by Gordon et al (US 6,481,012) in view of Pauley (US 5,900,916) in further view of Barton et al (US 6,233,389).

[claim 1]

In regard to Claim 1, Gordon et al, discloses a method for supporting a picture-in-picture (PIP) type time shifting comprising:

- receiving a plurality of broadcasting programs through a broadcasting network, and displaying the respective live broadcasting programs through a PIP structure on the screen (Figure 1 la shows the display of the real time broadcast programs (1004, 1006, and 1008) received from a broadcast network such as a cable television (Column 1 Lines 25-30);
- selecting, by an end user, one of the displayed plurality of broadcasting programs and displaying the selected one of the broadcasting programs on the screen (Figure 28 shows the selection of a broadcast program and the selecting of the program as described in Column 24 Lines 10-18);
- time shifting, by an end user, the selected one of the displayed plurality of broadcasting programs (Figure 32 and described in Column 26 Lines 7+)
- storing in a storage section the time-shifted broadcasting program (Figure 14 shows the memory 1476 which stores the program that is selected to be stored as described in Column 13 Lines 48-56); however, fails to disclose a third display step of displaying through the PIP structure on the screen at least one of the live broadcasting programs simultaneously with the second display step, and time shifting of a live broadcast wherein the broadcasting program displayed after being stored has a time interval from the currently received live broadcasting program, the time interval is controlled by the time shifting function in accordance with a volume of

stored broadcasting program in the storage section and the time shifting function includes at least fast rewind, stop, pause, or playback.

Pauley teaches a system wherein PIP is processed through tuners or recording medium (VCR 30 or DVD 32). The system provides the use of multiple images from various sources as described in Column 5 Lines 40+. Therefore, a live TV broadcast supplied by the tuner and a time shifted broadcast can simultaneously be displayed on the display (Figure 1) to allow for a system containing multiple inputs for the user. Additionally, it is noted that trick play methods such as rewind, pause, and fast forward can be done to the recording mediums (VCR and DVD). Therefore, it would have been obvious to one of ordinary skill in the art to use the picture-in-picture, as disclosed by Gordon, and further incorporate a system that has multiple inputs for picture-in-picture that allows for one window to have time shifting functions, as taught by Pauley.

Gordon in view of Pauley teaches a system having simultaneous TV broadcasting and time shifting through the input of VCR and DVD player; however, fails to disclose specific time shifting of trick play of live broadcast streams. Barton et al further teaches a video playback system to provide time shifting or trick play methods to the live or recorded streams, as disclosed in Column 12 Lines 20-34. The ability to time shift the program allows for the viewer to efficiently watch the programs and provide complete interaction with the system. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the supporting picture-in-picture type time shifting apparatus, as disclosed by Gordon et al, and further incorporate a system that shows multi-channels through one screen, as described by

Pauley, and further incorporate a system that allows for time shifting by an end user, as described by Barton et al.

[claim 2]

In regard to Claim 2, Gordon et al discloses a third display step further comprising the step of removing the picture of the selected broadcasting program reproduced through the time shifting, and displaying the plurality Of the currently received live broadcasting programs through the PIP (Figure 28 shows the selection of a real time/live broadcast which is reproduced as described in Column 14 Lines 10-20 and further displayed with the plurality Of currently received programs as seen in Figure 32 which shows the method Of displaying the various broadcast signals).

[claim 3]

In regard to Claim 3, Gordon et al discloses a method wherein the third display step further comprises the steps of:

- removing the corresponding live broadcasting program currently received and storing the corresponding live broadcasting program in the storage section (Figure 23a shows the object of each corresponding real time and non real time program to be displayed through the PIP while 23b shows the object and slice information that is stored from each program thereby further showing in Figure 31 the removing of the desired program and storing the section as described in Column 14 Lines 20+);

- reproducing the stored corresponding broadcasting program (Column 14 lines 10-20 describes the recording functions that are available to the user and further describes the reproducing Of the broadcasting program); and
- displaying the currently received live broadcasting program and the reproduced broadcasting program through the PIP structure on the screen (Figure 29 shows the method of displaying the live broadcast program which is selected for reproducing while Figure 27 shows the PIP display to the user).

[claim 24]

In regard to Claim 24, Gordon et al discloses a method for supporting a picture-in-picture (PIP) type time shifting, as described in Claim 1 with the additional limitations of:

- receiving a plurality of broadcasting programs through a broadcasting network receiving a plurality of broadcasting program lists through the broadcasting network, and displaying the broadcasting program lists on a screen (Figure 1 la shows the display of the real time broadcast programs (1004, 1006, and 1008) received from a broadcast network such as a cable television (Column 1 Lines 25-30);
- selecting one of the broadcasting program lists (Figure 28 shows the selection of broadcast);

- displaying the broadcasting programs based on the selected broadcasting program list (Figure 28 shows the displaying of the broadcast programs);
- time-shifting the selected one of the displayed plurality of broadcasting programs and storing in a storage section the time-shifted broadcasting program (Column 26 Lines 5+ describes the non-real time multimedia content which can be described as a time shifting event through further evidence that the system allows freezing and return functions of the video as described in Column 14 Lines 10-20); and
- displaying through a picture-in-picture (PIP) structure on the screen at least one of the live broadcasting programs simultaneously together with the time-shifted broadcasting program (Figure 14 shows the memory 1476 which stores the program that is selected to be stored as described in Column 13 Lines 48-56); however, fails to disclose a third display step of displaying through the PIP structure on the screen at least one of the live broadcasting programs simultaneously with the second display step, and time shifting of a live broadcast wherein the broadcasting program displayed after being stored has a time interval from the currently received live broadcasting program, the time interval is controlled by the time shifting function in accordance with a volume of stored broadcasting program in the storage section and the time shifting function includes at least fast rewind, stop, pause, or playback.

Pauley teaches a system wherein PIP is processed through tuners or recording medium (VCR 30 or DVD 32). The system provides the use of multiple images from various sources as described in Column 5 Lines 40+. Therefore, a live TV broadcast supplied by the tuner and a time shifted broadcast can simultaneously be displayed on the display (Figure 1) to allow for a system containing multiple inputs for the user. Additionally, it is noted that trick play methods such as rewind, pause, and fast forward can be done to the recording mediums (VCR and DVD). Therefore, it would have been obvious to one of ordinary skill in the art to use the picture-in-picture, as disclosed by Gordon, and further incorporate a system that has multiple inputs for picture-in-picture that allows for one window to have time shifting functions, as taught by Pauley.

Gordon in view of Pauley teaches a system having simultaneous TV broadcasting and time shifting through the input of VCR and DVD player; however, fails to disclose specific time shifting of trick play of live broadcast streams. Barton et al further teaches a video playback system to provide time shifting or trick play methods to the live or recorded streams, as disclosed in Column 12 Lines 20-34. The ability to time shift the program allows for the viewer to efficiently watch the programs and provide complete interaction with the system. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the supporting picture-in-picture type time shifting apparatus, as disclosed by Gordon et al, and further incorporate a system that shows multi-channels through one screen, as described by Pauley, and further incorporate a system that allows for time shifting by an end user, as described by Barton et al.

Conclusion

4. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contact Information

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAMIE JO VENT whose telephone number is (571)272-7384. The examiner can normally be reached on 7:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on 571-272-7353. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2623

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/John W. Miller/
Supervisory Patent Examiner, Art
Unit 2623

/J. J. V./
Examiner, Art Unit 2621